### June 2005 - Early Action Compact Progress Report

### **GREENVILLE COUNTY**

1. In an effort to keep our contact information updated; please provide the following information for your county:

	Name	Telephone	E-mail Address
Administrator/Manager	Joseph Kernell	(864) 467-7105	jkernell@greenvillecounty.org
EAC contact	John Owings or Sandra Yudice	(864) 467-7270	jowings@greenvillecounty.org
		(864) 467-7409	syudice@greenvillecounty.org

# 2. Please complete the attached Ozone Awareness Week checklist so that we will know which activities you did to promote awareness.

- 3. List any progress (if applicable) since your December 2004 submittal? (stakeholder meetings, events held; special projects, fleet Changes, Energy Star products purchased, Tree City USA, TABFTE, etc.)
  - On April 22, 2005 a ribbon cutting ceremony was held as a local fuel supplier the Spinx company began selling E-85 (85% ethanol 15% gasoline) at 2 stations located along Interstate 85. The owner had worked with the SC Clean fuels Coalition and the SC Department of Agriculture to bring this about. More outlets are planned.
  - A sub-committee of the Upstate Air Quality Staff Advisory Committee developed the wording for a bill to be considered by the SC State Legislature titled; an act concerning the promotion of alternative use fuel, and hybrid propulsion System For transportation purposes. The bill was submitted to the SC House of representatives in January 2005. The bill is now in committee.
  - In January 2005, Greenville County Council passed ordinances updating both the Zoning Ordinance and the Land Development Regulations. The changes focus on adding flexibilities that encourage cluster developments, neo-traditional development and mixed-use developments.
  - In January 2005, The Greenville County Planning Commission entered into a contract with a consultant, Day Wilburn and Associates to prepare a Transit Development Plan for the most rapidly growing portion of Greenville County. The study also includes a Park and Ride and Rideshare feasibility study.
  - In late 2004, Greenville County executed an agreement with the Southern Environmental Law Center in which Greenville County Agreed to a number of items. One of the items was a commitment to purchase flex fuel vehicles. Greenville has purchased 19 such vehicles since signing the agreement. Greenville county also published brochures about air quality, send out notices on high ozone days and developed commercials for local radio stations to play during ozone awareness week.

- 4. Do you have any plans to implement additional strategies and/or education and outreach activities during the 2005 ozone season? (It's not too late to use Ozone Awareness Week ideas!)
  - The Upstate Air Quality Staff Advisory committee will be developing a business partnership plan. Involving the local industries in announcing ozone alerts, participating in ride share programs and adopting the same or a similar list of initiatives that Greenville County adopted from the Southern Environmental Law Center.
  - Work with the Greenville Transit Authority to implement a program to allow free transit rides on high ozone alert days.
  - 5. Do you have any requests for specific assistance from the Department and/or the EPA?
    - Not at this time

#### **ATTACHMENT 1**

To South Carolina Department of Health and Environmental Control

**Environmental Protection Administration** 

From: Greenville County South Carolina

Date June 8, 2005

Reference: Summary of progress in implementing air quality strategies adopted by Greenville County and included in our Early Action Compact.

	Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
1.	Support SCDHEC statewide efforts to reduce ozone levels. Priority A	Members of the Upstate Air Quality Staff Advisory     Committee participated WITH dhec in the     development of new regulations aimed at reducing     NOx emissions. As a result, new regulations     requiring Nox- BACT (Best Available Control     Technology Economically Achievable) were     adopted in mid 2004.	Equivalent to removing 359,500 cars from the road or 7190 tons of VOC	Ongoing	Area: Countywide. Agency: SCDHEC, local governments.

	Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
2.	Designate an Ozone Action	Greenville County Council appointed two Ozone	Not applicable.	March 2003	Area: Countywide.
	Coordinator	Coordinators: John Owings and Sandra Yudice			Agency: local
	Priority A	-			governments.

Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
<ol> <li>Seek low sulfur fuels as early as possible.</li> <li>Priority A</li> </ol>	The Committee has continued to coordinate with representatives of Colonial and Plantation pipelines, refiners.  Colonial Pipeline conducted studies that indicates that S.C., as well as others along the Colonial Pipeline are receiving sulfur levels that should help many of the non-attainment areas. Specifically: M and V are the grades used in South Carolina. The sulfur content averages shown below are by batch not volumetric weighted values.		Ongoing	Area: Countywide Agency: local governments.

<ul> <li>M Grades</li> <li>Average 139 High 330</li> <li>V Grades</li> <li>Average 74 High 300</li> </ul>		
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Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
Design and implement congestion management and Intelligent     Transportation System (ITS) measures.     Priority A	<ul> <li>Greenville County completed implementation of phase 1 of the congestion management plan. Wade Hampton Boulevard, Woodruff Road and Pelham roads now have cameras, fiber optic cables and computer linked traffic signals in place. The consultant will conduct air quality sampling to determine if the system improved air quality along the corridors. Several more roads are scheduled for completion in 2006 and 2007. In July 2005, the Planning Staff will select a consultant to update the congestion management study</li> <li>Cameras and variable message boards have been installed on I-385 in Greenville County and along I-85 through Anderson, Greenville and Spartanburg counties.</li> </ul>		2003 and ongoing	Area: Cities and Counties major corridors. Agency: GRATS, SPATS, and ANATS.

Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
5. Use of hybrid vehicles. Priority A	The Greenville County Administrator signed a document that sets forth the intent to purchase low emitting vehicles for the county fleet. To follow that commitment Greenville has purchased 19 alternative fuel vehicles since November 2004		Counties: 2004-2005. Other local governments as soon as practical.	Area: countywide. Agency: local governments.

	Measure under Consideration	Description of Measure (A more detailed description will be included in the Early Action Plan.)	Estimate of Emission Reductions (if available)	Proposed Date for Implementation	Geographic Area and/or Local Government
6.	Use higher efficiency engines for school buses. Priority A	<ul> <li>No local action has taken place on this strategy</li> </ul>		As soon as practical.	Area: countywide. Agency: State and local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
7a. Develop incentive programs and opportunity for citizens to choose alternative transportation modes.	New buses purchased through the state's bus purchase program will have bike racks.  PARK and RIDE:  • .  •		2004	Area: Multi-County. Agency: Related agencies.
7b. Offer free or reduced transportation cost on high ozone days.	Implement a coordinated high ozone day alert action plan to include public notification and free or reduced ozone fares from the transportation		2004	Area: Multi-County. Agency: local transit providers and related

Priority A	providers.		agencies.
Priority A  7c. Reduce vehicle miles traveled by developing efficient user-friendly transit systems. Priority A	Greenville County: The Greenville County Planning Commission has completed an up date of the County Zoning Ordinance. Greenville County Council adopted it Jan 5, 2005. The new provisions will eliminate minimum lot size requirements, encourage cluster developments, grant density bonuses for developments with access to public transportation, allow some commercial developments to include housing within the development among many other changes. This shift in the land use plan should reduce vehicle miles traveled and encourage use of transit	2004	agencies. Area: Countywide. Agency: local transit authorities.
	services.		

	Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
8.	Support SCDHEC in evaluating and seeking reductions from major sources based on modeling. Priority A	Coordinate with Duke Power to determine what NOx reductions are planned for the Lee Steam Plant.     The Williams Company has received DHEC permits to replace outdated "uncontrolled" compressors on the pipeline located in Duncan. Replacement of the compressors began in late 2004 and continue until late 2005. This will result in a significant Nox reduction for the upstate.		2005	Area: Countywide. Agency: local governments, Chambers of Commerce, utilities, business and industry.

	Support NOx reduction strategies in the State	
	Implementation Plan.	
	Develop an Early Reduction Program with	
	incentives for industrial facility (Tier Two Type	
	emission NOx sources)	

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
9. Develop a program to offer to purchase or repair smoking vehicles (known as cash for clunkers).  Priority A	<ul> <li>No local action has taken place on this strategy         Use funds generated from a license plate sales,         registration fees, or license plate tax program to         buy or repair high emitting vehicles from         individuals.</li> <li>Purchase such vehicles from non-profit groups         such as the Kidney Foundation, Goodwill, Salvation         Army when they have been donated as charitable         gifts.</li> <li>Consider accelerated vehicle retirement         (scrappage) programs to encourage vehicle owners         to voluntarily retire their vehicles sooner than they         would have otherwise.</li> </ul>		2005	Area: countywide. Agency: local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Ban open burning of on-site commercial clearing debris during ozone season (April to October).     Priority A	<ul> <li>DHEC adopted regulations restricting open burning.</li> <li>Greenville County has notified all fire departments, all municipal and county codes departments, the Greenville Home Builders Association and others about the ban</li> <li>Greenville County is running a public service announcement in the County's Cable TV channel permanently.</li> </ul>		2004	Area: countywide. Agency: SCDHEC and local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed  Date for Implementation	Geographic Area and/or Local Government
11. Create incentives for the purchase of	A bill titled; An act concerning the promotion Of		2005	Area: Statewide.
high efficiency and low emissions	alternative use fuel, and hybrid propulsion System For			Agency: State and county
vehicles.	transportation purposes was submitted to the SC House			governments.
Priority A	of representatives in January 2005. The bill is now in committee.			
	In summary, the bill provides tax Credit for vehicles			
	using alternative fuel or hybrid propulsion vehicles. The			
	credit is allowed against the tax imposed by for the			
	purchase of vehicles licensed in South Carolina which			
	use, or which are converted within 120 days of purchase			
	to use, clean-burning fuel. Specifically the intent of the			
	bill will apply for income tax years beginning on or after January 1, 2004, but prior to January 1, 2013. The tax			
	credit will be allowed for the purchase of an alternative			
	fuel or hybrid propulsion vehicle, and for a motor vehicle			
	that is converted to use alternative fuel, for the			
	replacement of the power source with a power source			
	that uses alternative fuel			

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
12. Use land-use and transportation planning to improve air quality. Priority A	<ul> <li>Include air quality measures as a part of the land- use and transportation planning process.</li> </ul>		2004	Area: countywide. Agency: local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
13. Implement a program to encourage	Capture emissions from landfills to produce green		2004	Area: countywide.

use of green power.	power, e.g., In Spartanburg county, BMW is		Agency: local
Priority A	utilizing Palmetto Landfill emissions to produce		governments.
	energy for its plant.		
	No local action has taken place on this strategy		
	Implement a Purchase Green Power program when		
	available. Green power is electricity generated by		
	renewable resources like solar, wind, and even		
	decomposing garbage in selected landfills. These		
	resources are replenished naturally and minimize		
	harm to the environment.		

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Promote route efficiency for delivery vehicles, trash collection etc.     Priority A	<ul> <li>No local action has taken place on this strategy         Encourage business to consolidate distribution and collection routes to improve efficiency and reduce emissions from their fleets.     </li> <li>Maximize route efficiency for public services such as garbage collection, delivery vehicles, and other vehicle trips to reduce fuel usage.</li> </ul>		2004	Area: countywide. Agency: Chambers of Commerce

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed  Date for Implementation	Geographic Area and/or Local Government
15. Establish a clean air partnership with business and industry. Priority A	<ul> <li>This activity is scheduled for the summer of 2005. The focus of the partnership will be to:         <ul> <li>Encourage and coordinate alternate work schedules such as staggered work hours for business, industry and local governments.</li> <li>Establish park and ride lots serving perimeter counties along major corridors.</li> <li>Make the public aware of the park-and-ride concept: media could assist in publicizing which programs are available.</li> <li>Encourage carpooling/vanpooling as an option where employees living in the same area agree to ride to work together rather than to drive their individual vehicles to work.</li> <li>Consider parking facility controls that can include employers offering a tax-free transit/vanpool benefits and which limit the amount of parking and encourage carpooling, mass transit, etc.</li> <li>Encourage telecommuting.</li> <li>Adopt a Bus Program.</li> <li>Develop funding to be used for matching grants fund for several EAP Strategies.</li> </ul> </li> </ul>	Significant in the area of grants and local non-local tax funds generation.	2004	Area: countywide. Agency: local governments, local business, and Chambers of Commerce.
Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Establish an active public awareness campaign.     Priority A	Greenville County conducted an educational campaign during Ozone Awareness Week which included radio commercials, a display in the main lobby of Greenville County Square, presentations in schools and 27'x 9' banners displayed in the windows of the recycling center located in downtown Greenville. This educational		2004	Area: countywide. Agency: local governments, local media, health organizations, and Chambers of Commerce.

	campaign will continue throughout the current Ozone Season  The DHEC Ozone Forecast is updated daily on the County Cable TV Channel (except for Sundays). The TV Weather channel also announces the Ozone Forecasts. Greenville County also has posted DHEC's link on the County's home (front) page for Ozone Forecast. Greenville County also printed I and distributed air quality informational brochures to the public and through schools. The County also set up a display at County Square during Ozone Awareness Week  Distributed bookmarks to public at Greer Track Club Event on Earth Day  Update daily the ozone forecast on County's Cable TV Channel Radio ads Published an air quality article in local Hispanic newspaper Send e-mail to employees when DHEC forecast Orange Alerts and to Air Quality Steering Committee			
Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed  Date for Implementation	Geographic Area and/or Local Government
17. Promote research in energy efficiency at local universities, industries, energy companies, federal government, and other institutions that improve air quality.  Priority A	ALTERNATIVE FUELS  Clemson University Chemical engineering professor Mark C. Thies has received an \$856,000 award from the Department of Energy (DOE) to develop more efficient processes for the centralized production of hydrogen by splitting water.		2005	/agency: local universities.

The award was one of only three made nationwide under DOE's Nuclear Hydrogen initiative. In addition to Thies, the project team includes fellow Clemson David Bruce, John O'Connell from the University of Virginia and Max Gorensek from Savannah River National Lab.		
The Clemson team will interact not only with U. S. engineers and scientists but also with those in France, Italy, and Japan, all of whom have teams working on related processes.		

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed  Date for Implementation	Geographic Area and/or Local Government
18. Use of alternate fuels.	Alternate Fuel		Ongoing	Area: Countywide.
Priority B	Clemson University Professor James G. Goodwin, Jr.,			Agency: local businesses
	chair of the Clemson's chemical and bimolecular			and local governments.
	engineering department, has also received a DOE grant			
	for energy research through DOE's State Technologies			
	Advancement Collaborative.			
	Goodwin's work focuses on the performance of iron-			
	based bimetallic catalysts that are crucial to synthesis of			
	clean fuels, additives and lubricants derived from coal			
	and biomass gasification. Clemson will lead a			
	partnership that includes Louisiana State University, the			
	S.C. State Energy Office, the Louisiana State Energy			
	Office, North Carolina's Research Triangle Institute,			
	Rentech and Sud-Chemie Inc. This grant reflects			
	\$875,499 in DOE-STAC funds and \$294,499 in cost			
	sharing by the industrial and governmental participants.			

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Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
<ul><li>19. Evaluate the use of High Occupancy Vehicle (HOV) lanes using existing lanes.</li><li>Priority B</li></ul>	Traffic engineers with SCDOT indicate that because traffic volumes on I-85 exceed 100,000 vehicles daily on the 3 lanes of the interstate it would be unwise to convert one of the three lanes to a HOV lane. The offsetting increase in congestion in the two remaining lanes would predictably increase Nox emissions by an amount exceeding the any reductions gained from traffic moving in the HOV lane. HOV lanes work best when they are paralleled by at least 4 or more free flow lanes		2005	Area: Interstate limited access highways. Agency: SCDOT and SCDHEC.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
Modify speed limits for optimum fuel efficiency.     Priority B	Speed limits on the interstate highways in Greenville County have been established at 60 mph.		2005 or 2006	Area: Interstate highways. Agency: State Legislature and SCDOT.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed Date for Implementation	Geographic Area and/or Local Government
21. Develop process for evaluating and minimizing impact of major projects such as shopping centers, schools, and subdivisions.  Priority B	<ul> <li>No local action has taken place on this strategy Study impact of post construction traffic flow.</li> <li>Study impact of construction activities.</li> </ul>		2004	Area: countywide. Agency: local governments.

Measure under Consideration	Detailed description of measure	Current assessment of emission reductions	Proposed  Date for Implementation	Geographic Area and/or Local Government
22. Community Schools to reduce vehicle miles traveled and encourage biking and walking for students and parents by encouraging smaller community-based schools that are integrated into neighborhoods Priority B	Greenville County's Land Development Regulations were amended in January 2005 to require sidewalks to be installed in all new subdivisions.     Greenville County's Zoning ordinance was amended in January 2005 to allow cluster type developments, multifamily developments as part of commercial and office developments and to encourage Neo-traditional developments. Increased design flexibilities were added as incentives to develop pedestrian friendly designs.			Area: countywide. Agency: local governments, planning commissions, and school boards.

# Greenville County

# What did you do?

### Ozone Awareness Week 2005

Prior to Ozone Awareness Week (March 28th- April 1st), we provided the following outreach materials. Please check the initiatives that you did and explain to what extent you did them. If you did more, please include those items at the bottom. Also, if you have plans to use any of these materials during the 2005 ozone season, please include that information as well. Thanks for all of your hard work in making the 2005 Ozone Awareness Week a success!

<ul> <li>Posters (3 different)</li> <li>Explain: The County did not receive posters</li> </ul>
<ul> <li>Ozone and Your Health brochure</li> <li>Explain: printed and distributed brochures to the public and through schools</li> </ul>
<ul> <li>Display?</li> <li>Explain: set up a display at County Square during Ozone Awareness Week</li> </ul>
<ul> <li>Season bookmarks in employee paychecks</li> <li>Explain: printed and distributed brochures to the public and through schools</li> </ul>
□ "Do Your Part to Spare the Air" blue bookmarks in employee paychecks Explain: Distributed bookmarks to public at Greer Track Club Event on Earth Day
☐ Link to ozone forecast available on county web site Explain: link is on Greenville County's website
<ul> <li>Coloring book</li> <li>Explain: Distributed to public at Greer Track Club Event on Earth Day and to students in public schools</li> </ul>
□ "DRAFT" Press Release Explain: provided to public relations person for distribution
□ Proclamation from Governor to be distributed  Explain:
□ List of 25 things you can do to spare the air flyer Explain:_This list was distributed by e-mail to employees and Greenville County teachers
□ Copy of e-mail to distribute to employees

#### Extras:

- Update daily the ozone forecast on County's Cable TV Channel
- Radio ads
- Published an air quality article in local Hispanic newspaper

Explain: e-mail distributed to employees

• Send e-mail to employees when DHEC forecast Orange Alerts and to Air Quality Steering Committee